

STABILIZED VIRAL ENVELOPE PROTEINS AND USES THEREOF**Abstract of the Disclosure**

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This invention provides an isolated nucleic acid which comprises a nucleotide segment having a sequence encoding  
5 a viral envelope protein comprising a viral surface protein and a corresponding viral transmembrane protein wherein the viral envelope protein contains one or more mutations in amino acid sequence that enhance the stability of the complex formed between the viral surface  
10 protein and transmembrane protein. This invention also provides a viral envelope protein comprising a viral surface protein and a corresponding viral transmembrane protein wherein the viral envelope protein contains one or more mutations in amino acid sequence that enhance the  
15 stability of the complex formed between the viral surface protein and transmembrane protein. This invention further provides methods of treating HIV-1 infection.